Applicant : Konstantin V. Rodyushkin et al.   Attorney's Docket No.: 10559-831001 / P16146
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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

     1-26. (Cancelled)

     27. (Currently Amended) A method comprising:

     receiving a first digital image in a sequence of digital images and eye and mouth coordinates;

     outputting eye and mouth coordinates on a subsequent digital image in the sequence of digital images; and

     computing transformation parameters that represent a transformation from a base face model for the first digital image to a subsequent deformable model for the subsequent digital image; wherein receiving comprises estimating the base face model, denoted Mb, and the base face model's transformation parameters, denoted T', by the eye and mouth coordinates;

     wherein outputting comprises:

     calculating an initial model, denoted M, for the subsequent digital image as a transformed base model Mb using the transformation parameters T',

     rotating the subsequent image to the first digital image, denoted I(x,y), to generate a normalized model of the initial model M;

     calculating a horizontal and vertical gradient map on the rotated image; and

     estimating new transformation parameters, denoted T*, by minimizing an energy function E(T,I(x,y)) representative of the goodness of fit between the transformed model and the corresponding digital image, and of the optimality of the new transformation parameters, where

T* corresponds to the complex argument of the minimum of the energy function, denoted arg minT E(T,I(x,y)).

      28-30. (Cancelled)

      31. (Currently Amended) The method of claim [[30]] 27 in which minimizing comprises a downhill simplex method with initial transformation parameters T = T'.

      32. (Currently Amended) The method of claim [[30]] 27 further comprising calculating the eye centers and the mouth corners by the transformed base model using the transformation parameters T*.